

IN THE DRAWINGS

Please amend the drawings as follows:

In FIG. 2, please identify the network with reference numeral --19--.

REMARKS

Claims 1-39 are pending in the present application. In the above amendments, claims 1, 10, 18, 27, and 38 have been amended.

In the Office Action mailed August 24, 2004, the Examiner rejected claims 1-6, 8-12, 14, 18-23, 25-28, 30-34, and 36-38 under 35 U.S.C. § 102(a), claims 10, 13, 15, and 16 under 35 U.S.C. § 102(e), and claims 7, 24, 29, and 35 under 35 U.S.C. § 103(a). The Examiner also objected to claim 14.

Applicant respectfully responds to this Office Action.

Specification

Applicant provides herewith amendments to the specification. The amendments to the specification are made by presenting marked up replacement paragraphs which identify changes made relative to the immediate prior version.

The changes made are primarily typographical or grammatical in nature, or involve minor clarifications of awkward wordings.

Applicant believes these changes add no new matter to the application and are fully supported by the original disclosure.

Drawings

Applicant provides herewith amendments to FIG. 2 of the drawings. The replacement drawing sheet includes the reference number "19."

Applicant submits that the above amendments to the drawings do not make any substantive changes or introduce any new material, but are simply the correction of typographical errors. Applicant further submits that the amendments are consistent with the specification as originally submitted (See Applicant's Specification, p. 4, par. 1018). Therefore, approval and entry of the above amendments are respectfully requested.

Applicant has concurrently filed herewith a Letter to the Official Draftsperson submitting formal drawings to replace the originally filed formal drawings, including corrected drawing informalities indicated in this amendment.

Claim Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1-6, 8-12, 14, 18-23, 25-28, 30-34, and 36-38 under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,205,166 to Maruta et al.

The rejection contends that Maruta discloses a CDMA receiver and a method of using a CDMA receiver comprising a multi-element antenna configured to receive signals from at least one transmitter and to output highly correlated signals from the transmitters. In order to overcome the rejections, claims 1, 10, 18, 27, and 38 have been amended to emphasize that the controller is configured to determine a spatial signature, including amplitude and phase, for each signal. The receiver includes a search engine configured to receive the signals from each element of the antenna and determine a spatial signature, including the amplitude and phase of the signal received at each antenna element. (See Applicant's Specification, p. 2, par. 1007.) Using the complex signals at the output of the two antenna receivers, an estimate of the complex spatial signature "c" of the desired signal is made. The complex spatial signature of a signal includes the signal amplitude and the angle-of-arrival (AOA) of the signal. (See Applicant's Specification, p. 10, par. 1041.) Maruta does not describe this added feature.

Consequently, the Maruta Patent does not anticipate the structure defined in claims 1, 10, 18, 27, 32, and 38 under 35 U.S.C. § 102(a) for at least the foregoing reasons. Claims 2-6, 8-9, 11-12, 14, 19-23, 25-26, 28, 30-34, and 36-37 depend from claims 1, 10, 18, 27, 32, and 38 and therefore include all the limitations of those independent claims. Since the Maruta Patent does not render claims 1-6, 8-12, 14, 18-23, 25-28, 30-34, and 36-38, as amended, unpatentable Applicant respectfully submits that the rejections thereof be withdrawn by the Examiner.

The Examiner also rejected claims 10, 13, 15, and 16 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,369,758 to Zhang.

The rejection contends that Zhang discloses a CDMA receiver and a method of using a CDMA receiver comprising a multi-element antenna configured to receive signals from at least one transmitter and to output highly correlated signals from the transmitters. As mentioned above, in order to overcome the rejections, claim 10 has been amended to emphasize that the

controller is configured to determine a spatial signature, including amplitude and phase, for each signal. Zhang does not describe this added feature.

Consequently, the Zhang Patent does not anticipate the structure defined in claim 10 under 35 U.S.C. § 102(e) for at least the foregoing reasons. Claims 13, 15, and 16 depend from claim 10 and therefore include all the limitations of that independent claim. Since the Zhang Patent does not render claims 10, 13, 15, and 16, as amended, unpatentable Applicant respectfully submits that the rejections thereof be withdrawn by the Examiner.

Claim Rejections under 35 U.S.C. § 103

Then, the Examiner rejected claims 7, 24, 29, and 35 under 35 U.S.C. § 103(a) as being unpatentable over Maruta in view of U.S. Patent No. 5,901,174 to Richard. To establish a prima facie case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation of, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference(s) must teach or suggest all the claim limitations.

The rejection contends that Richard discloses receiving signals via multiple channels and using an optimal combiner. As mentioned above, in order to overcome the rejections, claims 1, 18, and 27 have been amended to emphasize that the controller is configured to determine a spatial signature, including amplitude and phase, for each signal. Maruta and Richard do not describe this added feature.

Applicant thus respectfully submits that claims 1, 18, 27, and 32 are not rendered obvious by the Maruta Patent when considered alone or in combination with Richard. Claims 7, 24, 29, and 35 depend from claims 1, 18, 27, and 32 and therefore include all the limitations of those independent claims. Since the Maruta and Richard Patents do not render claims 7, 24, 29, and 35, unpatentable Applicant respectfully submits that the rejections thereof be withdrawn by the Examiner.

Claim Objection

Finally, the Examiner objected to claim 14 due to lack of antecedent basis. This objection has become moot since claim 10 has been amended. The expression "spatial signatures" is now found in claim 10, which provides antecedent basis for claim 14.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 11/23/04

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